

IN THE DRAWINGS

The attached sheet of drawings includes changes to Figs. 19-20. This sheet, which includes Fig. 19-20, replaces the original sheet including Fig. 19-20.

Attachment: Replacement Sheet (1)

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 25-32 have been rejected under 35 U.S.C. § 112, second paragraph, as being vague and indefinite; Claims 17-28 and 32 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Caimi (U.S. Patent No. 4,644,690) and Claims 29-31 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Caimi in view of Okamoto (U.S. Patent No. 4,608,777). New Claims 33 and 34 have been added and thus, Claims 17-34 remain active.

Considering first then the rejection of Claims 25-32 under 35 U.S.C. § 112, second paragraph, it is to be noted that the claims have now been amended for closer compliance with U.S. patent practice and procedure, including deletion of the language considered by the Examiner to be vague and indefinite and amendment of the claims for proper antecedent basis. This includes deletion of the use of the phrase “elbow shaped” in Claims 29 and 30, properly claiming a ceiling of the opening in Claim 31, deletion of the term “implies” in Claim 32, revision of the language of Claim 25 and 26 to claim a pulley for each second carriage and deletion of the language in Claim 26 which has been objected to by the Examiner. Claim 27 has also been amended to delete the language objected to by the Examiner. Should the Examiner determine that any additional amendments to the claims are necessary by Examiner’s amendment to place the application in condition for allowance, the Examiner is invited to contact Applicant’s attorney.

Considering next then the rejection of Claims 17-28 and 32 under 35 U.S.C. § 103(a), Applicant submits that Claim 17 as now amended clearly patentably defines over Caimi as well as the remaining references of record, Applicant notes that, according to Caimi a first door (shutter) 1 is carried by an upper rail 3 and a lower rail 4 and the door can be shifted

longitudinally. A second door (shutter) 2 is carried by an upper rail 6 and another lower rail 5 is arranged in a side by side manner with the upper rail. When the doors 1, 2 are opened they are arranged so as to be distanced from each other and each comprises an upper and a lower gear arrangement having rollers or wheels 17, 35; 50, 51 for longitudinally shifting the doors. The first door 1 is arranged with linear extending rods 25, 41 and angular push arms 20, 40 which can be pivoted to push the first door 1 transversally in a direction away from a compartment to be opened or closed.

According to invention it is possible to distance both the shutters / doors away from their compartments so as to be opened or closed, thus making it possible to shift only the first door or only the second door and to thus use less space for installation thereof. According to Caimi it is not possible to move the second door if the first door did not have been opened because the second door cannot be shifted transversally.

Caimi discloses a mechanism making possible the opening of first door 1 and overlapping it in front of the second door 2 by the swiveling mechanism mounted at the carriages. However, it would be not possible to open door 2 and overlap it in front of door 1 because the second door 2 can be moved only lengthwise along a rail as can be seen from the structure shown in Fig. 6 of Caimi. The second door 2 of Caimi, does not teach a mechanism making possible moving of the door 2 away from the compartment so as to thus be opened or closed. In addition, it would be not possible to arrange such mechanism for opening of the door 1 in Caimi. Otherwise, the opening and swiveling mechanism of one of such doors would disable the mechanism of the other door. Thus, according to Caimi the second door 2 can be moved only after opening of the first door 1.

According to present invention, each of the shutters/doors can be opened and permit overlap of one door without opening the other door. Both doors of present invention can thus be moved in a coplanar manner during the closing movement thereof. Thus, the

shutters/doors of the present invention can be moved in an independent and a completely different manner as compared with the shutters/doors of Caimi.

Furthermore, the gear/arrangement of Caimi comprises a pair of rectangular arms 20-40 having a pivot point at a push rod 25, 41 provided with small lateral rollers 23, 38 in an eyelet 24 at the upper bracket 10 and being provided with a lower bracket 30 having an elongate slot 39 in one part thereof. This arrangement makes possible the transversal shifting of the first door. Within the bracket, the pushing arms 20, 40 and their push rods 25, 41 must be guided via a pair of upper transversal bushings 13 and a pair lower transversal rails 33. Only thereafter can they be rotated and thus shift the door to run in a transversal direction to make possible the first door 1 being shifted in a superposing manner in front of the second door 2, the second door being not moved up to this point in time. Furthermore, elastic means 26, 43 are necessary in Caimi to push back the first door into the coplanar position of the same when closing it.

The transversal shifting of both doors/shutters is provided in the present invention by the transversally arranged first pair of carriages 3a, 3b which can be shifted along longitudinally arranged second carriages 4a, 4b. One set of the carriages is guided along the first longitudinally extending rails 53, 59. The other carriages are guided by the cam guide 6 having grooves 61, 62. In particular, such arrangement functions without any elastic means. However, such can comprise shock absorbers, which can be used during the last phase of the opening or closing movement.

Furthermore, the arrangement according to Caimi makes it necessary to use brackets 10 and 30 having exactly the same length as the doors, and having the same length as the upper rails 4 and 6. In contrast, the brackets/clamps 2 of present invention are only slightly longer than the length of the transversally arranged carriages, and such carriages thus have to be supported.

The carriages of present invention are arranged as a pair of carriages 3a, 3b; 4a, 4b for each of the doors/shutters. In contrast, according to Caimi it would be not possible to mount a bracket on the half length of the upper door - because the push rods 25, 41 having the guide sleeves 13 and the rails 33 must be arranged at the ends of the brackets 10 and 30 and must have the same length as that of the individual doors.

In summary, the present invention and Caimi both comprise doors/shutters, which are coplanar when closing a compartment. However, the method and arrangement for opening the doors are completely different in terms of arrangement and their functioning. Thus there are completely other gear mechanisms/guiding mechanisms for moving the doors utilized in the present invention as compared with Caimi. More particularly, the mechanism according to Caimi does not make it possible to lift the doors out of their rails. Furthermore, the arrangement according to present invention and according to Caimi needs a completely different dimensioned room for installation thereof.

The disclosure of Okamoto teachings a closing mechanism for railway doors and does not disclose a mechanism for opening doors in the manner disclosed and claimed according to present invention.

Applicant further notes that new independent Claim 33 has been added which includes all of the limitations of Claim 17 mentioned above and which claims that the grooves of the cam guide comprise bent ends. These features are based upon the disclosure as originally filed and corresponds as indicated in the Figures which shows that the grooves 61, 62 of the cam guide which have bent end portions 61a, 62b as particularly shown in Figure 2 of the present invention. Insofar as Caimi and the remaining references of record do not teach grooves forming cam guides, such clearly do not teach grooves for cam guides which comprise bent ends as claimed in Claim 33. Applicant further notes that in Caimi, there is only disclosed a swiveling element for moving the shutter (door) away from the

compartment to be opened or closed. In addition, Caimi only discloses a linear rail to move the shutter parallel to the compartment. By contrast, Claim 33 claims grooves of a can guide having bent ends mentioned above.

It is to be further noted that independent Claim 34 has been added which includes the limitations of Claim 17 plus those set forth in Claims 28-32. As can thus be appreciated, and essential in feature of independent Claim 34 is the transmission shaft as claimed. This corresponds with the elbow-shaped transmission shaft 73 which extends parallel to the shutter 1b from the upper side of the shutters to the lower side thereof within the compartment to be closed. The shaft 73 is guided so as to be movable at an upper side thereof via a roller 75 that slides on the sides of an opening 57 of the section to be closed within the profile 5 and along the profile. At the lower side of the shaft 73, such is guided by the end section 72 thereof opposite the extremity 72 in the guide 70 which is placed on a side opposite of the profile. The guide is provided as a linear guide placed at the bottom F of the opening V of the compartment.

Applicant notes that the elbow-shaped sections of the shaft 33 are each guided by use of a fixing element 76. The fixing elements have a slot to make possible a swiveling of the elbow-shaped section of the shaft. The fixing elements 76 are fixedly mounted to the inner side of the shutter. Therefore, as can be seen from Figures 9, 19, 20 in the present application, the middle section of the shaft 73 can be rotated around its axis extending between the two fixing elements 76 (Fig. 9) so as to make possible a swiveling of the shutter 1b in a direction towards or away from the compartment to be closed, while leaving the end sections 72, 74 of the shaft 73 within the guiding/rails 57, 70.

Further disclosure regarding the swiveling, elbow transmission shaft 73 of present invention is set forth on the description on page 13, penultimate paragraph, through page 14, line 14 of the present invention. Figures 19 and 20 disclose the shutter having a differently

swiveled shaft 73 to open the shutter. Especially, it would be sufficient to have only one such elbow-shaped section. This shaft 73 is therefore completely different from the swiveling mechanism of Caimi, such having no axis mounted to the door in such manner.

In view of the foregoing, it is submitted that each of independent Claims 17-33 and 34 clearly patentably define over Caimi as well as the remaining references of record. In view of the dependency of Claims 18-32 from Claim 17, it is submitted that such also merit indication of allowability.

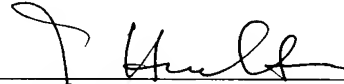
Considering next then the rejection of Claims 29-31 under 35 U.S.C. § 103(a) as being unpatentable over Caimi in view of Okamoto, it is submitted that Okamoto fails to rectify the deficiencies noted hereinabove with regard to Caimi.

Applicant further submits that Okamoto does not disclose a shaft used for swiveling a shutter in the direction of a compartment to be opened or closed but for movement away from such compartment. The shaft or mechanism 11 shown in Figures 7a, 7b of Okamoto is instead directed to a blocking mechanism to fix a door in a closed or opened position. In contrast to the present invention, swiveling of the door in Okamoto is provided by the door 6 having wheels 7, 8 at an upper end thereof and such is provided at the lower ends thereof with members for being guided on a rails 4, 5 located at upper and lower sides of the compartment to be closed. To make it possible for movement of the door in a direction away from the compartment to be closed, the wheels are mounted on the door in such a manner that they can be pivoted. It is therefore submitted that Okamoto does not rectify the deficiencies of Caimi and, moreover, would not be obviously combinable with Caimi due to its different structure and functioning as compared with the sliding door of Caimi.

In view of the foregoing, an early and favorable Office Action is believed to be in order and the same is hereby respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Registration No. 25,599

James D. Hamilton
Registration No. 28,421

Attorneys of Record

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 03/06)

I:\ATTY\JDH\27s\278\278627US\278627US AM DUE 11.26.08.doc